Document Release Status

Release Date	Version
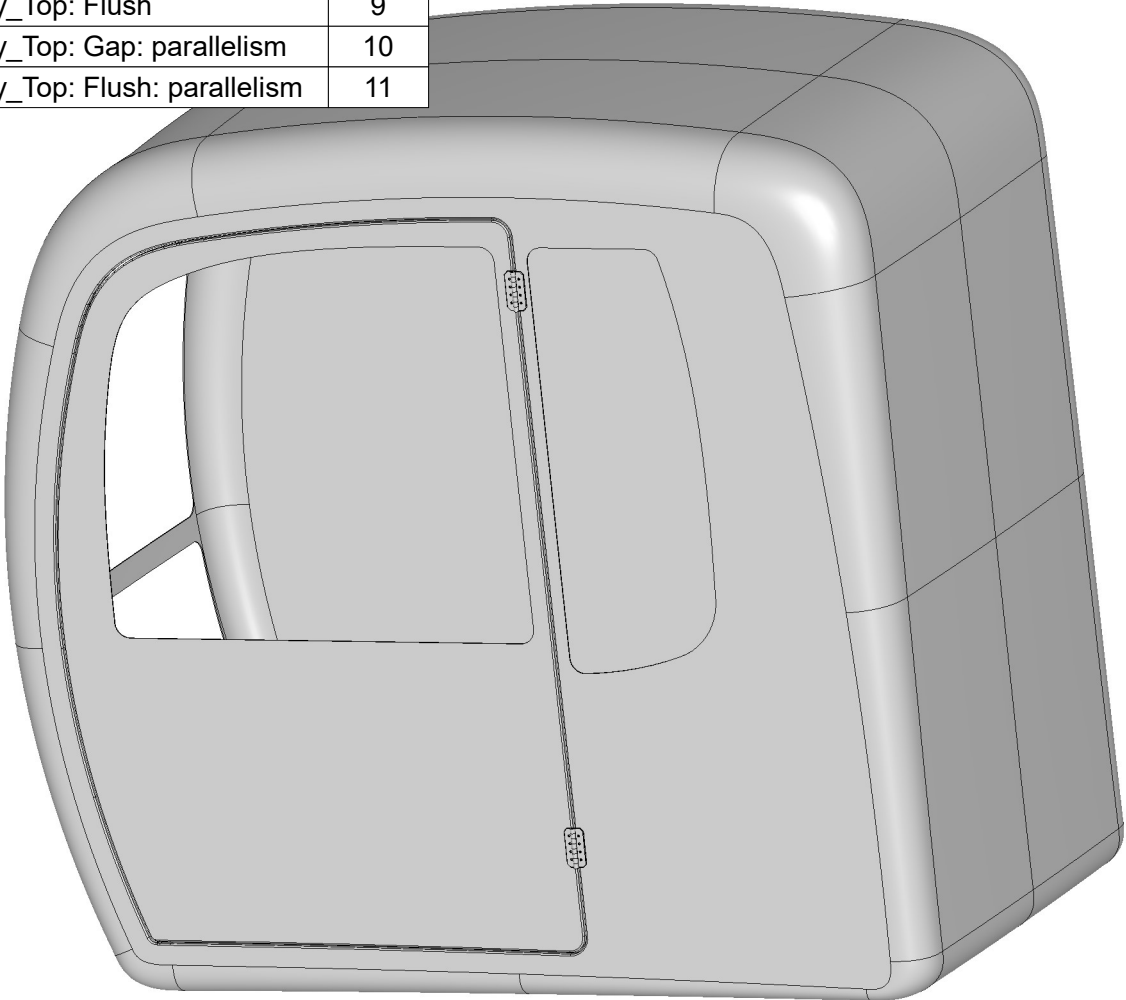
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POINT NO.	X	Y	Z	NOTE
A1	1020.62	-502.15	1456.83	
A2	1020.30	-502.06	286.85	
A3	-9.51	-489.25	697.62	
B	1020.62	-502.15	1456.83	
C	1020.30	-502.06	286.85	

COORDINATE VALUES ONLY FOR INFORMATION.
EXACT DEFINITION IN DIGITAL SHAPE MODEL.

RD&T Technology

Edge

⌒ 2 A B C

A1

B

A3

Edge

⌒ 2 A B C

Edge

⌒ 2 A B C

A2

C

Z

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Door_Assy_Top

C 3.0±1.7//0.9
D 3±0.1//1

C -0.0±1.4//0.9
D 0±0.25//1

Door_Assy_Side

C 3.0±1.0//0.7
D 3±0.1//1

C -0.0±1.0//0.9
D 0±0.25//1

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Z

Y

X
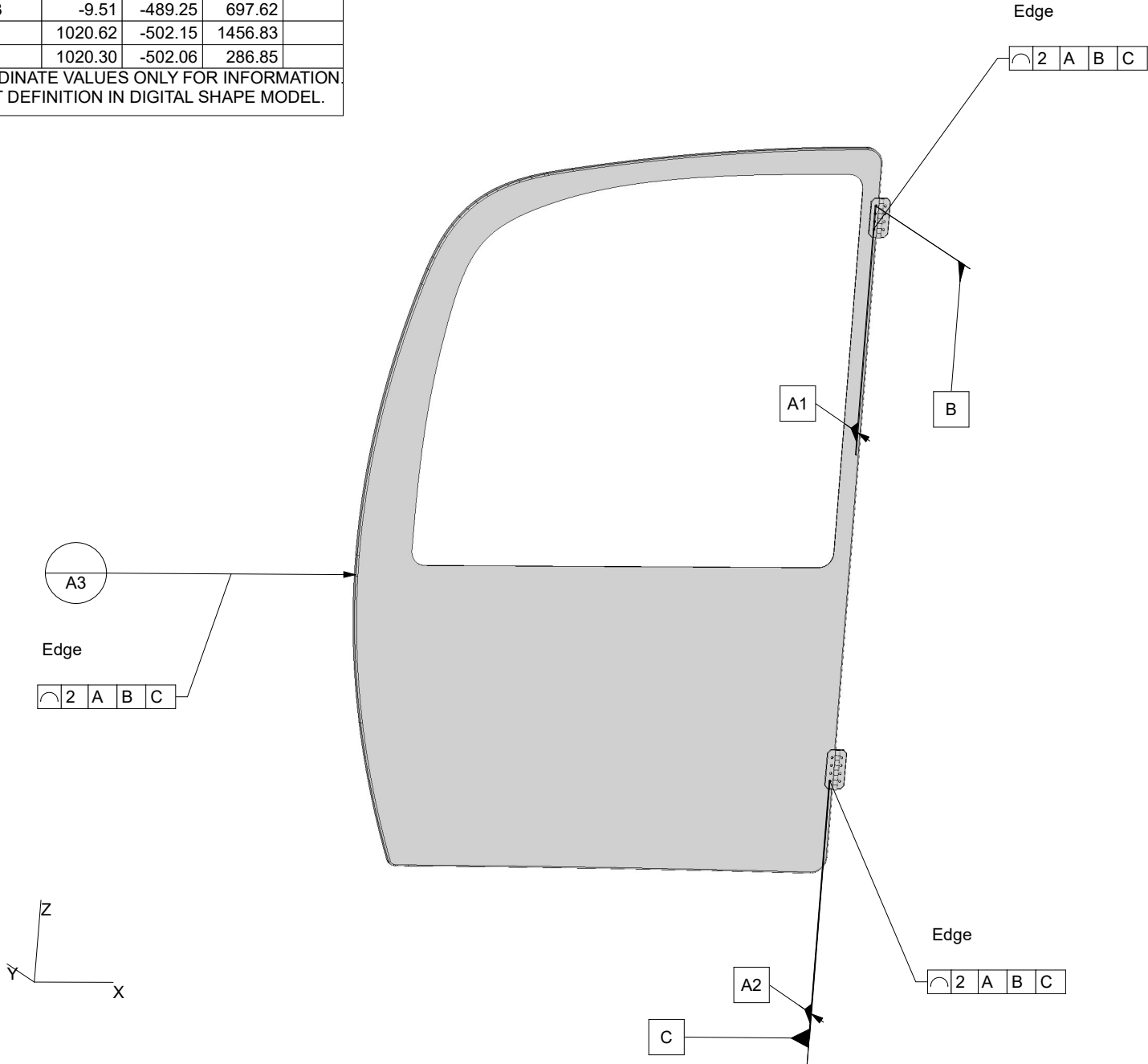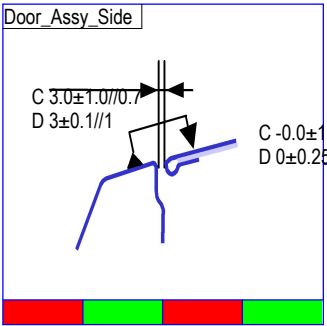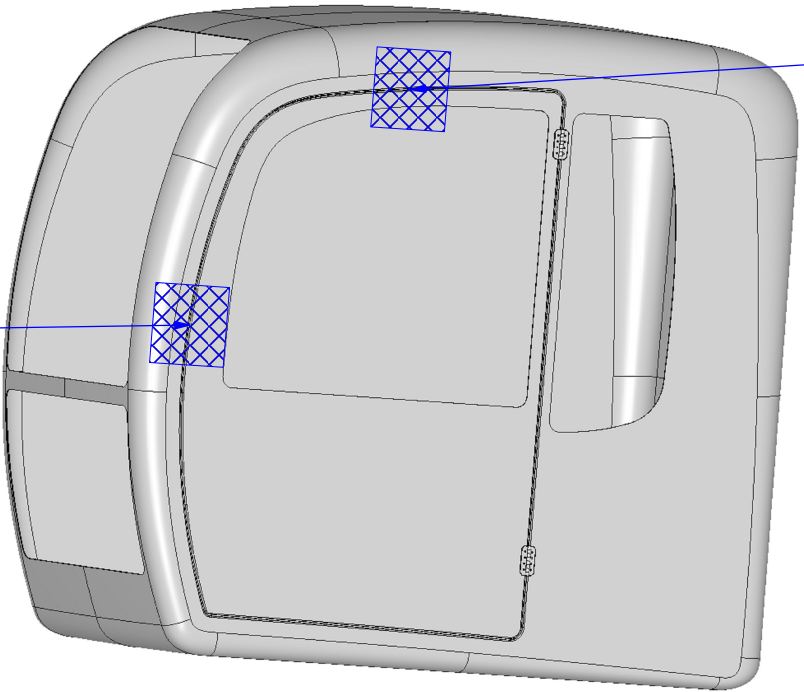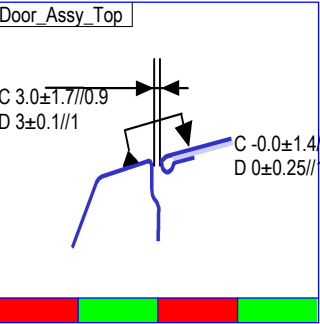
Door_Assy_Side: Gap

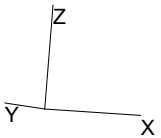|	Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1	SubAssy01_Auto_2			30.4%	2.00	1.50
2	Hinge_Bottom_Auto			30.3%	2.00	1.50
3	SubAssy01_Auto_2			15.9%	2.00	1.50
4	Hinge_Top_Auto			15.9%	2.00	1.50
5	SubAssy01_Auto_2			5.1%	2.00	1.50
6	Cab_MP4			1.0%	0.20	0.15
7	Door_MP4			1.0%	0.20	0.15
8	Hinge_Top_Auto			0.2%	2.00	1.50
9	SubAssy01_Auto_2			0.1%	2.00	1.50
10	Hinge_Bottom_Auto			0.0%	2.00	1.50
11	Hinge_Bottom_Auto			0.0%	2.00	1.50
12	SubAssy01_Auto_2			0.0%	2.00	1.50
13	Hinge_Top_Auto			0.0%	2.00	1.50
14	Hinge_Bottom_Auto			0.0%	2.00	1.50
15	Hinge_Bottom_Auto			0.0%	2.00	1.50

RD&T SIMULATION (8 sigma)	2.0	(69.75% Out)

The demand is calculated to 3.0 ± 1.0 mm

The demand is specified as 3 ± 0.1

Runs	10000	Min	2.08
Cp	0.127	Max	4.04
Cpk	0.131	Range	1.96

LDL UDL

-3STD	Mean	+3STD
2.24	3	3.77
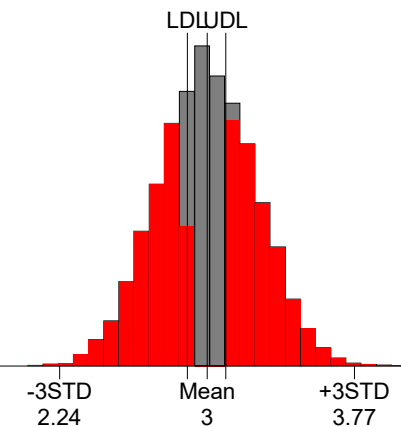
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.41	0.00	0.01	0.00	0.00	0.41	0.04
Hinge_Bottom	0.56	0.01	0.01	0.01	0.00	0.56	0.00
Door	0.73	0.01	0.00	0.23	0.41	0.56	0.04
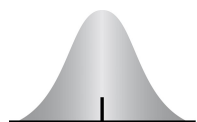
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Door_Assy_Side: Flush					
Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1 SubAssy01_Auto_2			99.3%	2.00	1.50
2 SubAssy01_Auto_2			0.1%	2.00	1.50
3 Hinge_Bottom_Auto			0.1%	2.00	1.50
4 SubAssy01_Auto_2			0.1%	2.00	1.50
5 Hinge_Bottom_Auto			0.1%	2.00	1.50
6 Hinge_Top_Auto			0.1%	2.00	1.50
7 Door_MP4			0.1%	0.20	0.15
8 Cab_MP4			0.1%	0.20	0.15
9 Hinge_Bottom_Auto			0.1%	2.00	1.50
10 Hinge_Bottom_Auto			0.0%	2.00	1.50
11 SubAssy01_Auto_2			0.0%	2.00	1.50
12 Hinge_Top_Auto			0.0%	2.00	1.50
13 SubAssy01_Auto_2			0.0%	2.00	1.50
14 Hinge_Top_Auto			0.0%	2.00	1.50
15 Hinge_Top_Auto			0.0%	2.00	1.50

RD&T SIMULATION (8 sigma)	2.0	(32.53% Out)

The demand is calculated to -0.0 ± 1.0 mm

The demand is specified as 0 ± 0.25

Runs	10000	Min	-0.944
Cp	0.327	Max	0.919
Cpk	0.332	Range	1.86

	LDL	UDL	
-3STD		Mean	+3STD
-0.757		-0.00378	0.749
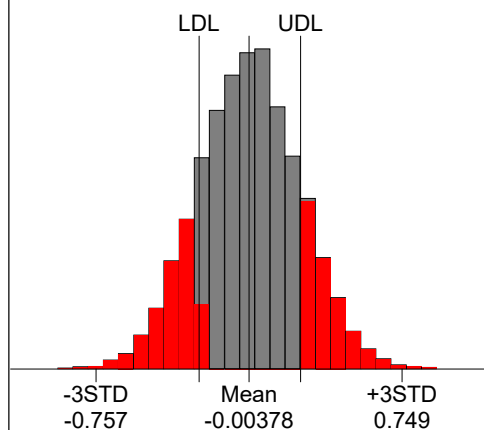
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.03	0.00	0.02	0.01	0.00	0.00	0.00
Hinge_Bottom	0.05	0.02	0.02	0.03	0.00	0.01	0.00
Door	1.00	0.03	0.04	1.00	0.00	0.01	0.00

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Door_Assy_Side: Gap Para

	Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1	SubAssy01_Auto_2			21.3%	2.00	1.50
2	Hinge_Top_Auto			21.1%	2.00	1.50
3	SubAssy01_Auto_2			14.5%	2.00	1.50
4	SubAssy01_Auto_2			8.9%	2.00	1.50
5	Hinge_Bottom_Auto			8.8%	2.00	1.50
6	Hinge_Top_Auto			8.2%	2.00	1.50
7	SubAssy01_Auto_2			8.1%	2.00	1.50
8	Cab_MP4			2.2%	0.20	0.15
9	Cab_MP3			2.2%	0.20	0.15
10	Door_MP3			2.2%	0.20	0.15
11	Door_MP4			2.2%	0.20	0.15
12	SubAssy01_Auto_2			0.1%	2.00	1.50
13	Hinge_Bottom_Auto			0.1%	2.00	1.50
14	SubAssy01_Auto_2			0.1%	2.00	1.50
15	Hinge_Top_Auto			0.1%	2.00	1.50

RD&T SIMULATION (4 sigma)	0.7	(0.00% Out)

The parallelism demand is calculated to 0.7 mm

The demand is specified as 1

Runs	10000	Min	-0.293
Cp	1.95	Max	0.919
Cpk	1.96	Range	1.21

	-3STD	Mean	+3STD
	-0.144	0.367	0.878
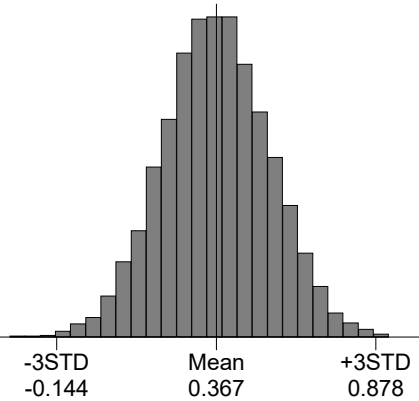
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.37	0.00	0.02	0.00	0.00	0.20	0.31
Hinge_Bottom	0.21	0.02	0.01	0.02	0.00	0.20	0.00
Door	0.50	0.02	0.02	0.26	0.19	0.20	0.31
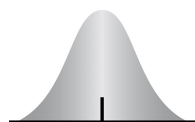
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Door_Assy_Side: Flush Para

	Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1	SubAssy01_Auto_2			29.4%	2.00	1.50
2	SubAssy01_Auto_2			20.0%	2.00	1.50
3	Hinge_Bottom_Auto			17.6%	2.00	1.50
4	Hinge_Top_Auto			13.7%	2.00	1.50
5	Hinge_Bottom_Auto			9.2%	2.00	1.50
6	Hinge_Bottom_Auto			7.5%	2.00	1.50
7	Hinge_Top_Auto			1.3%	2.00	1.50
8	SubAssy01_Auto_2			0.9%	2.00	1.50
9	Hinge_Top_Auto			0.3%	2.00	1.50
10	Door_MP4			0.1%	0.20	0.15
11	Cab_MP4			0.1%	0.20	0.15
12	SubAssy01_Auto_2			0.0%	2.00	1.50
13	SubAssy01_Auto_2			0.0%	2.00	1.50
14	Cab_MP3			0.0%	0.20	0.15
15	Door_MP3			0.0%	0.20	0.15

RD&T SIMULATION (4 sigma)	0.9	(0.00% Out)

The parallelism demand is calculated to 0.9 mm

The demand is specified as 1

Runs	10000	Min	0.188
Cp	1.42	Max	1.86
Cpk	1.43	Range	1.67

LDL

-3STD	Mean	+3STD
0.367	1.07	1.77
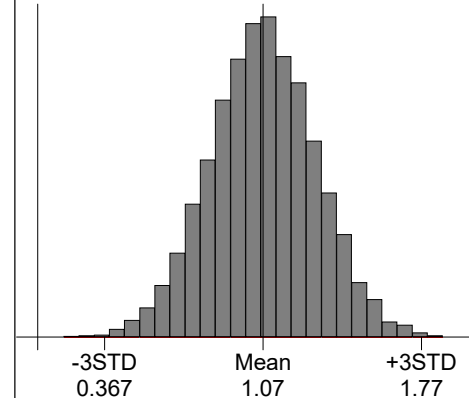
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.36	0.05	0.34	0.11	0.00	0.00	0.00
Hinge_Bottom	0.54	0.28	0.26	0.39	0.00	0.00	0.00
Door	0.66	0.50	0.42	0.09	0.01	0.01	0.00
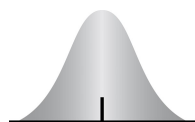
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Door_Assy_Top: Gap					
Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1 Hinge_Top_Auto			34.3%	2.00	1.50
2 SubAssy01_Auto_2			34.1%	2.00	1.50
3 Hinge_Bottom_Auto			10.0%	2.00	1.50
4 SubAssy01_Auto_2			10.0%	2.00	1.50
5 SubAssy01_Auto_2			5.5%	2.00	1.50
6 Hinge_Top_Auto			5.3%	2.00	1.50
7 Cab_MP2			0.3%	0.20	0.15
8 Door_MP2			0.3%	0.20	0.15
9 SubAssy01_Auto_2			0.0%	2.00	1.50
10 SubAssy01_Auto_2			0.0%	2.00	1.50
11 SubAssy01_Auto_2			0.0%	2.00	1.50
12 Hinge_Top_Auto			0.0%	2.00	1.50
13 Hinge_Bottom_Auto			0.0%	2.00	1.50
14 Hinge_Bottom_Auto			0.0%	2.00	1.50
15 Hinge_Bottom_Auto			0.0%	2.00	1.50

RD&T SIMULATION (8 sigma)	3.4	(81.94% Out)

The demand is calculated to 3.0 ± 1.7 mm

The demand is specified as 3 ± 0.1

Runs	10000	Min	1.18
Cp	0.0786	Max	4.66
Cpk	0.0795	Range	3.48

LDLIDL

-3STD	Mean	+3STD
1.74	3	4.26
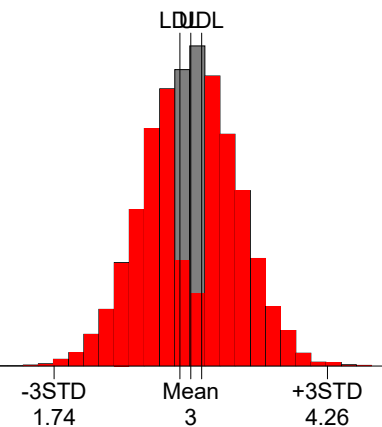
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	1.07	0.00	0.02	0.00	0.00	0.39	0.99
Hinge_Bottom	0.54	0.01	0.01	0.01	0.00	0.54	0.00
Door	1.19	0.03	0.02	0.02	0.40	0.54	0.99
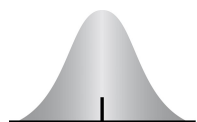
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Door_Assy_Top: Flush

	Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1	SubAssy01_Auto_2			34.5%	2.00	1.50
2	SubAssy01_Auto_2			19.0%	2.00	1.50
3	Hinge_Top_Auto			16.0%	2.00	1.50
4	SubAssy01_Auto_2			10.5%	2.00	1.50
5	Hinge_Bottom_Auto			9.2%	2.00	1.50
6	Hinge_Bottom_Auto			4.8%	2.00	1.50
7	Hinge_Bottom_Auto			4.0%	2.00	1.50
8	Hinge_Top_Auto			1.5%	2.00	1.50
9	Hinge_Top_Auto			0.4%	2.00	1.50
10	SubAssy01_Auto_2			0.0%	2.00	1.50
11	Hinge_Bottom_Auto			0.0%	2.00	1.50
12	Door_MP2			0.0%	0.20	0.15
13	Cab_MP2			0.0%	0.20	0.15
14	Hinge_Top_Auto			0.0%	2.00	1.50
15	SubAssy01_Auto_2			0.0%	2.00	1.50

RD&T SIMULATION (8 sigma)	2.9	(47.90% Out)

The demand is calculated to -0.0 ± 1.4 mm

The demand is specified as 0 ± 0.25

Runs	10000	Min	-1.25
Cp	0.23	Max	1.52
Cpk	0.233	Range	2.77

	-3STD	Mean	+3STD
	-1.07	-0.00367	1.07
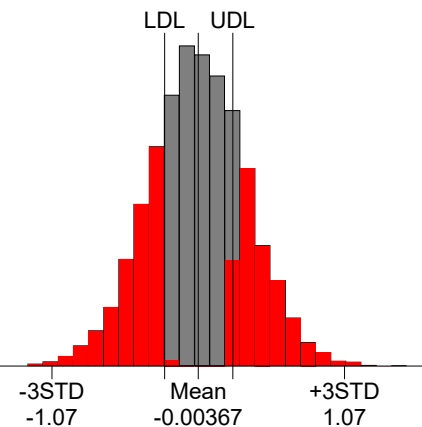
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.61	0.09	0.57	0.18	0.00	0.00	0.00
Hinge_Bottom	0.61	0.31	0.29	0.44	0.00	0.01	0.00
Door	1.14	0.84	0.46	0.62	0.01	0.00	0.00
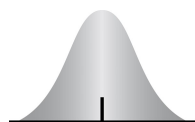
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Door_Assy_Top: Gap Para

	Static Variation	Tolerance Name	Comments	Contr. %	Tol.	6s
1	Hinge_Bottom_Auto			31.7%	2.00	1.50
2	SubAssy01_Auto_2			31.7%	2.00	1.50
3	SubAssy01_Auto_2			15.8%	2.00	1.50
4	Hinge_Top_Auto			15.8%	2.00	1.50
5	Cab_MP1			1.2%	0.20	0.15
6	Cab_MP2			1.2%	0.20	0.15
7	Door_MP2			1.2%	0.20	0.15
8	Door_MP1			1.2%	0.20	0.15
9	SubAssy01_Auto_2			0.0%	2.00	1.50
10	SubAssy01_Auto_2			0.0%	2.00	1.50
11	Hinge_Bottom_Auto			0.0%	2.00	1.50
12	Hinge_Bottom_Auto			0.0%	2.00	1.50
13	Hinge_Bottom_Auto			0.0%	2.00	1.50
14	SubAssy01_Auto_2			0.0%	2.00	1.50
15	Hinge_Top_Auto			0.0%	2.00	1.50

RD&T SIMULATION (4 sigma)	0.9	(0.00% Out)

The parallelism demand is calculated to 0.9 mm

The demand is specified as 1

Runs	10000	Min	-0.807
Cp	1.48	Max	0.829
Cpk	1.48	Range	1.64

LDL   UDL

-3STD	Mean	+3STD
-0.666	0.00965	0.686
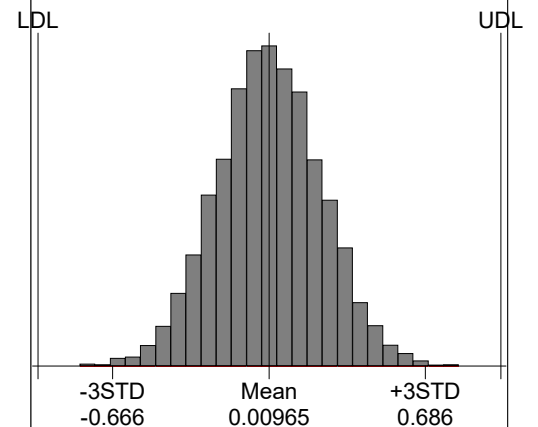
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.36	0.00	0.00	0.00	0.00	0.36	0.01
Hinge_Bottom	0.51	0.01	0.01	0.01	0.00	0.51	0.00
Door	0.63	0.00	0.02	0.02	0.36	0.51	0.01
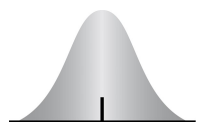
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Door_Assy_Top: Flush Para						
Static Variation		Tolerance Name	Comments	Contr. %	Tol.	6s
1	SubAssy01_Auto_2			45.8%	2.00	1.50
2	SubAssy01_Auto_2			15.5%	2.00	1.50
3	Hinge_Bottom_Auto			13.6%	2.00	1.50
4	SubAssy01_Auto_2			8.0%	2.00	1.50
5	Hinge_Bottom_Auto			7.1%	2.00	1.50
6	Hinge_Bottom_Auto			5.8%	2.00	1.50
7	Hinge_Top_Auto			3.7%	2.00	1.50
8	Hinge_Top_Auto			0.4%	2.00	1.50
9	Hinge_Top_Auto			0.1%	2.00	1.50
10	Hinge_Bottom_Auto			0.0%	2.00	1.50
11	Door_MP1			0.0%	0.20	0.15
12	Cab_MP1			0.0%	0.20	0.15
13	Door_MP2			0.0%	0.20	0.15
14	Cab_MP2			0.0%	0.20	0.15
15	Hinge_Top_Auto			0.0%	2.00	1.50

RD&T SIMULATION (4 sigma)	0.9	(0.00% Out)

The parallelism demand is calculated to 0.9 mm

The demand is specified as 1

Runs	10000	Min	-0.782
Cp	1.5	Max	0.793
Cpk	1.5	Range	1.57

-3STD	Mean	+3STD
-0.654	0.0128	0.68
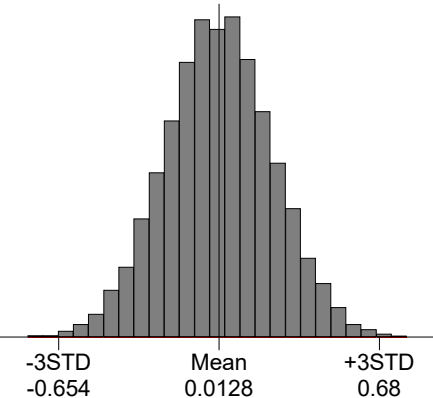
P-Frame	RSS	A1	A2	A3	B1	B2	C1
Hinge_Top	0.18	0.03	0.17	0.05	0.00	0.00	0.00
Hinge_Bottom	0.46	0.24	0.21	0.33	0.00	0.00	0.00
Door	0.74	0.25	0.35	0.60	0.00	0.00	0.00

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